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| 10/562,987 | 12/29/2005 | Karl Hehl | HE160-000HE | 3525 |
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| EXAMINER | | | | |
| DASGUPTA, SOUMYA | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,987

Applicant(s)

HEHL, KARL

Examiner

SOU MYA DASGUPTA

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/US)
Paper No(s)/Mail Date 12/29/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This is the initial office action based on 10/562,987 application filed on 12/29/2005. Claims 1 - 25, as originally filed, are currently pending and have been considered below. Claims 1 and 15 are independent claims.

Priority

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

Claim Objections

Claims 1-25 are objected to because of improper indentation. If a claim sets for a plurality of elements or steps, each element or step of the claim should be separated by a line indentation, 37 CFR 1.75 (i). There may be plural indentations to further segregate subcombinations or related steps. In general, the printed patent copies will follow the format used but printing difficulties or expense may prevent the duplication of unduly complex claim formats.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

15-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 15-24:

In summary, Claim 15 recites an "*apparatus*" comprising "*a data processing unit*" (see Line 3), "*an input unit*" (see Line 3), "*a data set*" (see Lines 12 and 14), and "*a navigation surface*" (see Line 19) . The "*a data processing unit*", "*an input unit*", "*a data set*", and "*a navigation surface*" are software elements. Thus, the "*apparatus*" is computer software *per se*.

Computer software is not a process, a machine, a manufacture or a composition of matter, as set forth in 35 U.S.C. 101. Accordingly, the claims do not recite statutory subject matter.

Claims 16-24 merely recite additional computer software components and/or functionality of the "*system*." Thus, none of Claims 16-24 recite statutory subject matter.

Applicant may obviate the rejection by cancelling the claims.

Claim 25:

Claim 25 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim fails to place the invention within one statutory class of invention. In Line 1 of Claim 25, applicant has provided evidence that applicant intends the "medium" to use signals. As such, the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this one of the four categories of invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps or acts and this is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefore not a composition of matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7, 9-20, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al (US 6,684,264; Patent Issue Date: Jan 27, 2004; Patent Filing Date: Jun 16, 2000; Assignee: Husky Injection Molding Systems; hereafter Husky) in view of Wical (US 6,240,410; Patent Issue Date: May 29, 2001; Assignee: Oracle Corp; hereafter Wical).

Claim 1:

Choi discloses:

Method for interactive control of a plastics material injection molding machine, where, via an input unit, which is provided with actuating fields, (Col 1, lines 8-17; Figs 2-19 → Choi discloses a plastic molding machine interface in which the user can input data.)

operating parameters necessary for an operating sequence of a machine are input, in a form which prompts an operator, (Col 7, line 62 – Col 9, line 25 → Choi discloses a GUI with operating parameters and variables.)

into a data processing unit which stores these operating parameters, and (Col 4, lines 1-30 → Choi discloses a storage unit.)

subsequently one or more operating sequences are carried out in accordance with the stored operating parameters, wherein a data set covering basic rules of the operating sequence of the machine is recorded in the data processing unit and, by using the data set, as a result, the operator is provided on a surface with visualization of a selected choice of input possibilities, based on a machine configuration and(Figs 5 -19 → Choi discloses this limitation in that a user can navigate and control a molding machine with a GUI.)

a machine environment, for additional parts of the operating sequence that can be added in a compatible manner into existing parts of the operating sequence, (Col 10, line 15 - 36 → Choi discloses this limitation in that the user can add or remove buttons that would suit his desired task.)

wherein for manual input and/or for input by means of a manipulator, the input unit makes available to the operator on the surface a selected choice of actuating fields corresponding to the additional parts of the operating sequence and (Col 10, line 15 - 36 → Choi discloses this limitation in that the user can add or remove buttons that would suit his desired task.)

Choi discloses *hierarchical navigation buttons*. (Col 9, lines 30 – 39)

Choi does not appear to explicitly disclose:

for navigation on a navigation surface statically arranged on the surface, wherein the navigation surface comprising at least three lines or three columns of actuating and input fields is hierarchical from line to line or column to column, and is represented on the surface with a plurality of navigation levels associated with one another.

Wical discloses:

for navigation on a navigation surface statically arranged on the surface, wherein the navigation surface comprising at least three lines or three columns of actuating and input fields is hierarchical from line to line or column to column, and is represented on the surface with a plurality of navigation levels associated with one another. (Figs 2-9 and Col 12, line 50 – Col 14, line 7 → Wical discloses this limitation in that a hierarchical navigation system is presented to the user in layers. These layers are functionally equivalent to “line to line” or “column to column.”)

Choi and Wical are analogous art because they are from the same field of endeavor of hierarchical GUI menu navigation.

At they time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Choi and Wical before him or her, to incorporate machine

controlling interface with hierarchical menus, as disclosed by Choi, with a hierarchical menu presented in layers, as disclosed by Wical .

The motivation for doing so would have been to allow a more organized presentation of GUI menus so that the user can navigate the system more efficiently.

Therefore, it would have been obvious to combine Choi with Wical to obtain the invention as specified in the instant claim.

Claim 2:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

the actuating fields are imaged as input fields. (Figs 5 -10 → Choi discloses input fields that control a molding machine.)

Claim 3:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

the hierarchical navigation surface is represented with three lines. (Fig 2 → Choi discloses a GUI with lines with buttons.)

Claim 4:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

a parameter region is represented on the surface for numeric and/or graphic representation of operating parameters. (Fig 5 → Choi discloses a GUI with input parameters.)

Claim 5:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

in addition to the navigation levels, a sequence editor representing the operating sequence in a schematic manner is represented on the surface.. (Col 9, lines 30 – 39 → Choi discloses this limitation in that the operating sequence has hierarchical buttons.)

Claim 6:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

the operating sequence comprises sequence symbols and when a sequence symbol is tapped, parameter images associated with the sequence symbol are displayed on the respective navigation level. (Fig 16 and 17 → Choi discloses an operating sequence.)

Claim 7:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

the navigation levels comprise at least one top navigation level and at least one bottom navigation level and when three navigation levels are provided, the at least one top navigation level is represented symbolically in one line, whilst the at least one bottom navigation level is represented completely in the additional lines. (Fig 5 → Choi discloses this limitation in that 1 set of buttons are on the top row of the GUI and 2 sets of buttons are presented on the 2 bottom rows of the GUI.)

Claim 9:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

favorite fields are preset or are presettable on the surface by the user and when actuated the favorite fields lead to a jump, independent of the navigation, to a

preset or presetable parameter group. (Col 10, line 15 - 36 → Choi discloses this limitation in that the user can add or remove buttons that would suit his desired task. Col 11, lines 15-26 → Choi discloses a short-cut button in order a single button can do multiple processes.)

Claim 10:

Choi and Wical disclose the limitation of Claim 9.

Choi also discloses:

when the favorite field is actuated, the parameter image edited last in the associated parameter group is displayed. (Col 10, line 15 - 36 → Choi discloses this limitation in that the user can add or remove buttons that would suit his desired task. Col 11, lines 15-26 → Choi discloses a short-cut button in order a single button can do multiple processes. If the user adds and saves the button , even when he does this last, then the button will show up under favorites.)

Claim 11:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

tables are represented on the surface for inputting operating parameters and wherein, from these, a preferably non-editable graphic representation of the required values converted therefrom is generated. (Col 9, line 40-61 → Choi discloses “non-editable graphic representation” in that factory pre-set control buttons are available for use.)

Claim 12:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

an editable input diagram is represented on the surface. (Col 10, line 15 - 36 →

Choi discloses this limitation in that the user can add or remove buttons that would suit his desired task.)

Claim 13:

Choi and Wical disclose the limitation of Claim 12.

Choi also discloses:

the representation of the input of the operating parameters for the various directions of axes displacement is effected in the direction of axes displacement.

(Fig 5 → Choi discloses this limitation in that buttons are featured on the x-axis and the y-axis.)

Claim 14:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

the method is carried out on a cyclically operating plastics material injection molding machine. (Col 1, line 65 – 67 → Choi discloses "cyclically" in that the system can be designed to assign several functions to a single button for simultaneous actuation. Therefore, the single button could be programmed to the same task multiple times.)

Claim 15:

Claim 15 corresponds to Claim 1.

Claim 16:

Claim 16 corresponds to Claim 2.

Claim 17:

Claim 17 corresponds to Claim 3.

Claim 18:

Claim 18 corresponds to Claim 4.

Claim 19:

Claim 19 corresponds to Claim 5.

Claim 20:

Claim 20 corresponds to Claim 7.

Claim 22:

Claim 22 corresponds to Claim 9.

Claim 23:

Claim 23 corresponds to Claim 10.

Claim 24:

Claim 24 corresponds to Claim 11.

Claim 25:

Claim 25 corresponds to Claim 1.

Claims 8 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al (US 6,684,264; Patent Issue Date: Jan 27, 2004; Patent Filing Date: Jun 16, 2000; Assignee: Husky Injection Molding Systems; hereafter Husky) in view of Wical (US 6,240,410; Patent Issue Date: May 29, 2001; Assignee: Oracle Corp; hereafter Wical) in further view of Bannai et al (US 4,674,053; Patent Issue Date: June 16, 1987; Assignee: Toshiba; hereafter Bannai).

Claim 8:

Choi and Wical disclose the limitation of Claim 1.

Choi also discloses:

the operating sequence comprises sequence symbols (Fig 5) and tapping the sequence symbols leads to the representation of a relevant parameter region.(Fig 5)

Choi and Wical do not appear to explicitly disclose:

in the event of an alarm, the sequence symbols of the operating sequence relating to the alarm are identified

Bannai discloses:

in the event of an alarm, the sequence symbols of the operating sequence relating to the alarm are identified (Col 4, line 63 – Col 5, line 20 → Bannai discloses an alarm.)

Choi and Wical are analogous art because they are from the same field of endeavor of hierarchical GUI menu navigation. Choi and Bannai are analogous art because they are from the same field of endeavor of molding machine. Choi, Wical, and Bannai are analogous art because they are from the same field of endeavor of process control.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Choi and Wical before him or her, to incorporate machine controlling interface with hierarchical menus, as disclosed by Choi, with a hierarchical menu presented in layers, as disclosed by Wical, and with an alarm for an injection molding machine, as disclosed by Bannai.

The motivation for doing so would have been to allow a more organized presentation of GUI menus so that critical events are handled by a GUI.

Therefore, it would have been obvious to combine Choi and Bannai with Wical to obtain the invention as specified in the instant claim.

Claim 21:

Claim 21 corresponds to Claim 8.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SOUMYA DASGUPTA whose telephone number is (571)272-7432. The examiner can normally be reached on M-Th 9am-7pm, F 9am-1pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SD

/Rachna S Desai/
Primary Examiner, Art Unit 2176